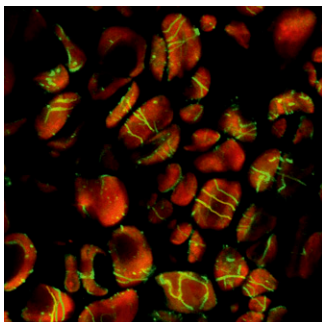


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ON THE COVER



During plant growth and development, chloroplasts divide repeatedly in order to maintain their population. The site of division is specified by the medial placement of the Filamentous temperature sensitive Z (FtsZ) ring. Wilson et al. (pages 2939–2949) show that two mechanosensitive channel homologs, MSL2 and MSL3, are necessary for proper FtsZ ring placement and chloroplast division. The cover shows cauline leaf mesophyll cells of *msl2 msl3* double mutant plants expressing FtsZ1-green fluorescent protein (GFP), which contain grossly enlarged chloroplasts with aberrant FtsZ ring placement. FtsZ1-GFP and chlorophyll fluorescence are represented by pseudo-color green and red, respectively.





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



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
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